

REMARKS/ARGUMENTS

Claims 1-7, 9,10 and 16-20 are pending. Solely in an effort to advance prosecution claims 1-4 and 16-20 are amended to encompass potentially infringing subject matter. No new matter has been added. Further, Applicant reserves the right to file continuing applications to cover disclosed subject matter not encompassed by the currently pending claims.

It is believed that the above claim amendments place this application in condition for allowance.

Claim Rejections Under 35 USC § 112

The Office Action rejects claims 1-20 under 35 USC § 112, second paragraph, as allegedly been undefined. In solely in an effort to advance prosecution, Applicant has amended to the second paragraph and claims to address the clarity and antecedent basis concerns asserted by the Office Action. In view of the claim amendments, reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections Under 35 USC § 103

The Office Action rejects claims 3 and 4 under 35 USC § 103 as allegedly being unpatentable over Pedahzur (Water Science and Technology, 31, 5-6, pp.123-129) and Komatsu at al (U.S.P.N. 6,121,191). Applicant respectfully traverses this rejection by making amendments to claims 3 and 4.

Claim Rejections Under 35 USC § 102

The Office Action rejects claims 1-20 under 35 USC § 102(b) as allegedly being unpatentable over Komatsu at al (U.S.P.N. 6,121,191). Applicant respectfully traverses this rejection.

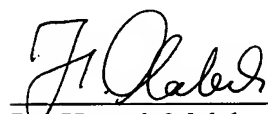
Komatsu merely discloses a method of increasing photocatalytic efficiency of titanium dioxide by attaching metal nanoparticles to titanium dioxide. Metal nanoparticles in this complex donate electrons to titanium dioxide under UV light exposure that increases photocatalytic efficiency of titanium dioxide. The phenomena of donating electrons by nanoparticles and photocatalytic effect of titanium dioxide are photoelectric effects, well-known Compton effects. These photoelectric effects are NOT surface plasmon resonance effects upon which Applicant's instant claims are based. Please also note, that 40 nanometer or less nanoparticles in the Komatsu reference have surface plasmon resonance excitation bands in visible part of spectrum and NOT in UV that was used by Komatsu for photocatalytic effects.

Applicant therefore, respectfully submit that the imposed rejections under 35 USC § 102(b) as being anticipated by Komatsu are not factually viable, and, hence, respectfully request reconsideration and withdrawal thereof.

Conclusion

All outstanding issues have been addressed. Taking into consideration the totality of the application as filed (i.e., the specification, claims and drawings), the currently amended application is in compliance with 35 USC § 112.

Sincerely,



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08/10/07

Date